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Revamping the Classical *Dhumayantra*

Rahul H¹, Dhanya P², Nandhana Gosh³

¹Assistant Professor, Department of Panchakarma, Vaidyaratnam Ayurveda College, Ollur, Kerala, India.

^{2,3}House Surgeon, Department of Panchakarma, Vaidyaratnam Ayurveda College, Ollur, Kerala, India.

ABSTRACT

Ayurveda is a traditional authentic science in which there are truths and trials yet to be discovered. *Dhumapana* is one among them. *Dhumanetra* and *Dhumavarti* are the main components in performing *Dhumapana*. Even though *Dhumapana* is of three kinds, *Dhumanetra* is one and only the same for all the procedures except in its length. In classics, *Acharyas* have mentioned specific materials that can be incorporated to make a *Dhumanetra*. Considering the cost effectiveness, availability, settings, economical aspect, non-reactiveness with *Dhuma*, safety, Clay is selected to make *Dhumanetra*. *Dhumanetra* attached to a *Dhuma Chalika* along with a handle made with the help of a pottery professional in Kerala is chosen as a prototype for effective *Dhumapana*. *Dhumayantra* is smeared inside with *Ghrita* (ghee) so that patients get benefits of *Ghrita* which can enhance the effectiveness of *Dhumapana*.

Key words: *Dhumayantra*, *Dhumanetra*, *Dhumapana*, *Yantra*

INTRODUCTION

Dhumapana using medicated elements is the procedure in which fumes are taken through nose or through mouth and expelled out through mouth.^[1] In Ayurvedic classics *Dhumapana* is also mentioned under the broad umbrella of *Nasya Karma* (medicines instilled through nose) which is an important *Panchakarma* procedure.^[2] In classical texts of *Ayurveda*, *Acharya Charaka*^[3] and *Vagbhata*^[4] have mentioned *Dhumapana* in the context of *Dinacharya*, whereas *Acharya Susruta* has described *Dhumapana* as a parasurgical procedures.^[5] It is not only performed as an individual procedure, but also as *Paschat Karma* of various procedures. *Dhumapana* is specially indicated

for disorders of *Vata* and *Kapha* pertaining to *Urdhwajatru* (diseases pertaining to parts of the body above the neck). It cures *Gaurava* (heaviness of head), *Shirashula* (headache), *Pinasa* (Rhinitis), *Ardhavabhedaka* (Migraine), *Karnashula* (Earache), *Akshishula* (Pain in eye), *Kasa* (Cough), *Hikka* (hiccup), *Shwasa* (Dyspnoea), *Galagraha* (Obstruction in throat), *Dantadaurbalya* (weakness of teeth), *Astrava* (Discharge from the morbid ear, nose and eye), *Putigandha* (purulent smell from nose and mouth), *Dantashula* (toothache), *Arochaka* (Anorexia), *Hanu Manya Graha* (Lock jaw), *Kandu* (itching), *Krimi* (worm infections), *Panduta Mukhe* (paleness of face), *Slesma Praseka* (increased salivation), *Vaisvarya* (impaired voice), *Galashundi* (disease of throat), *Upajihvika* (diseases of tongue), *Khalitya* (Alopecia), *Pinjaratva* (greying of hair), *Kesha Patana* (hair fall), *Kshvathu* (sneezing). *Atitandra* (excessive drowsiness), *Buddi Moha* (loss of consciousness), and *Atinidrata* (excess sleep). The hair roots of the skull become strong, improves *Swara* and enhances the perceptions of *Indriya*.^[6] To administer *Dhumapana* effectively, *Dhumavarti* and *Dhumanetra* are the essential components.

Dhumavarti

For *Prayogika Dhumapana*, Drugs like *Harenuka* (*Pisum*

Address for correspondence:

Dr. Rahul H

Assistant Professor, Department of Panchakarma,
Vaidyaratnam Ayurveda College, Ollur, Kerala, India.

E-mail: drrahulayurveda@gmail.com

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sativum), *Priyangu* (*Callicarpa macrophylla*), *Chandana* (*Santalum album*), *Usheera* (*Vetiveria zizanoides*), *Jatamansi* (*Nardostachys jatamansi*), bark of *Nyagrodha* (*Ficus bengalensis*), *Musta* (*Cyperus rotundus*), *Shallaki* (*Boswellia serrata*) etc. are pounded.^[7] For *Snahika Dhumapana*, drugs of sweet taste along with *Vasa* (fat), *Ghrita* (ghee), *Madhuyashti* (beeswax), and *Jeevaniya* (rejuvenating) drugs are used. For *Vairechanika Dhumapana*, *Shveta* (*Clitoria ternatea*), *Jyotishmati* (*Celastrus paniculatus*), *Haratala* (Orpiment), *Agaru* (*Aquilaria agalocha*), *Patra* (*Cinnamomum tamala*) are used.^[8]

To prepare *Dhumavarti* these powdered drugs are made into *Kalka* (paste). This *Kalka* is applied to a hollow reed of *Sara* plant and then made into a cigar of the shape of *Yava* (barley grain) having central thickness of thumb and length of Eight *Angula* (approximately 16 cm). After the paste dries, reed of *Sara* plant is removed, smear the wick with *Ghee*.

Dhumanetra

According to *Acharya Charaka*, the *Dhuma* passed through the *Dhumanetra* become *Tanu* (soft) and not harmful for *Indriyas*.^[9] So, the *Dhumanetra* is essential for *Dhumapana*. According to *Vagbhatta*^[10], *Dhumanetra* is straight with 3 chambers with a base allowing free movement of the thumb and tip with the size of *Kolasthi* (seed of jujube). The length of *Dhumanetra* differs according to the function it plays.

Acharya Susruta, mentions about the thickness of *Dhumanetra* to be of little finger at its front portion, having an orifice allowing a *Kalaya* (Round pea) to pass through, with the thickness of the thumb at its base in *Prayogika Dhumapana*. In the case of *Snehana*, *Virechana*, *Kasagna*, *Vamaniya Dhumanetra*, permits the passage of *Kolasthi* through it. *Dhumanetra* for *Vrana Dhumapana* is of thickness as that of round pea and with orifice in front allowing a *Kulatha* (horse gram) to pass through.^[11] Considering all the measurements and its pertinence in action, *Dhumanetra* attached to a *Dhuma Chalika* and altogether it is made into *Dhumayantra*. Length of *Dhumanetra* is mentioned in Table 1.

Table 1: Length of *Dhumanetra* according to different *Acharyas*

Classics	Types	Length of <i>Dhumanetra</i>
<i>Ashtanga Hridaya</i>	<i>Snigdha</i>	32 <i>Angula</i> (63.36cm)
	<i>Madhya</i>	24 <i>Angula</i> (47.52cm)
	<i>Tikshna</i>	40 <i>Angula</i> (79.2cm)
<i>Charaka Samhitha</i>	<i>Vairechanika</i>	24 <i>Angula</i> (47.52cm)
	<i>Snehika</i>	32 <i>Angula</i> (63.36cm)
	<i>Prayogika</i>	36 <i>Angula</i> (71.28cm)
<i>Susruta Samhitha</i>	<i>Prayogika</i>	48 <i>Angula</i> (95.04cm)
	<i>Snehika</i>	32 <i>Angula</i> (63.36cm)
	<i>Vairechanika</i>	24 <i>Angula</i> (47.52cm)
	<i>Kasagna</i>	16 <i>Angula</i> (31.68cm)
	<i>Vamaniya</i>	16 <i>Angula</i> (31.68cm)

According to classics, materials used are the same as that of *Vastinetra* as mentioned in Table 2. They are metals like Gold, silver, copper, iron, brass, also wood, bone, bamboo, tusk, horn.^[12] Even though there are different materials for making *Dhumanetra*, many a times folded chart paper, written paper, *Dhumavarti* as such is used for *Dhumapana*. By using written paper directly there will be interaction of chemicals like carbon, sulphur etc with *Dhuma*. There is more chance of burns while using a folded chart paper and *Dhumavarti* as such. We cannot control the *Dhuma* inside while using these. By considering these aspects,

the need of development of a *Dhumayantra* which can be used effectively is an exigency.

Table 2: Materials used for making *Dhumanetra*

<i>Ashtanga Hridaya</i>	Metals like Gold, silver etc., <i>Daru</i> (wood), <i>Asthi</i> (bone), <i>Venu</i> (bamboo)
<i>Charaka Samhita</i>	<i>Suvarna</i> (gold), <i>Rupya</i> (silver), <i>Trapu</i> (tin), <i>Tamra</i> (copper), <i>Riti / Pitala</i> (brass), <i>Kamsya</i> (bronze), <i>Asthi</i> (bones of animals), <i>Venu</i> (bamboo reed), <i>Danta</i> (teeth), <i>Nala</i> (horn), <i>Vishana/ Mahishadi Shringa</i> (horns of buffalo) and <i>Mani</i> (gems)
<i>Susruta Samhita</i>	<i>Suvarna</i> (Gold), <i>Rajata</i> (silver), <i>Tamra</i> (copper), <i>Ayo</i> (iron), <i>Riti</i> (brass), <i>Danta</i> (tusk), <i>Sringa</i> (horn), <i>Mani</i> (beads), <i>Taru Sara</i> (pith of trees)

AIMS AND OBJECTIVES

In the current scenario, folded chart paper and *Dhumavarti* as such is used for *Dhumapana*. While using these:

- There is interaction of chemicals with *Dhuma* and thus emission of toxic fumes
- There are more chances of burns
- Duration and volume of *Dhuma* cannot be regulated according to patient's need

The veritable materials for preparation of *Dhumanetra* as per classics are not easily available. And also, the length mentioned for *Prayogika Dhumanetra* is inconvenient in current practice. Because of these reasons, in spite of its broad effects, the procedure is not clinically utilised. So here is an attempt to modify the structure and material of *Dhumayantra* with the aid and suggestions of different experts. Through these modifications the practice of *Dhumapana* is increased and patients also benefit from the same.

METHODOLOGY

Structure: *Dhumayantra* can be divided into 2 parts :

- Dhumanetra*
- Dhumachalika*

Dhumanetra can be divided as:

- Mulabhaga*: This is the part where it is attached to a base with material same as that of the nozzle inside which *Dhumavarti* is placed.

- Agrabhaga*: This is the part through which smoke comes out.
- Nalika*: The part which connects *Agrabhaga* and *Mulabhaga*.

Here *Dhumanetra* is made into a conical shape with *Mulabhaga* with a diameter of 2.5 to 3 *Angula* (approximately 5 to 6cm) and circular shape. *Agrabhaga* is circular with a diameter of 0.5 *Angula* (approximately 1cm). *Nalika* with slant height as 10 *Angula* (approximately 20cm) as in Fig.1

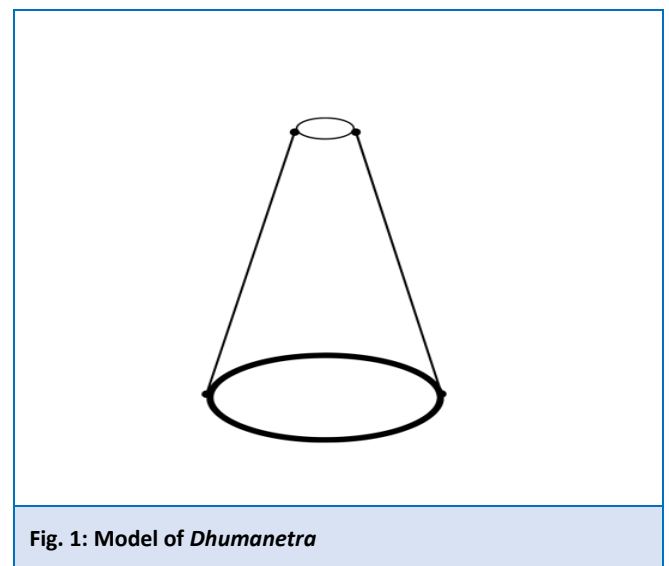


Fig. 1: Model of *Dhumanetra*

Base: It is hemispherical in shape and this is setup to accommodate *Dhumanetra* above and *Dhumavarti* inside. It is also attached with handle as in Fig. 2

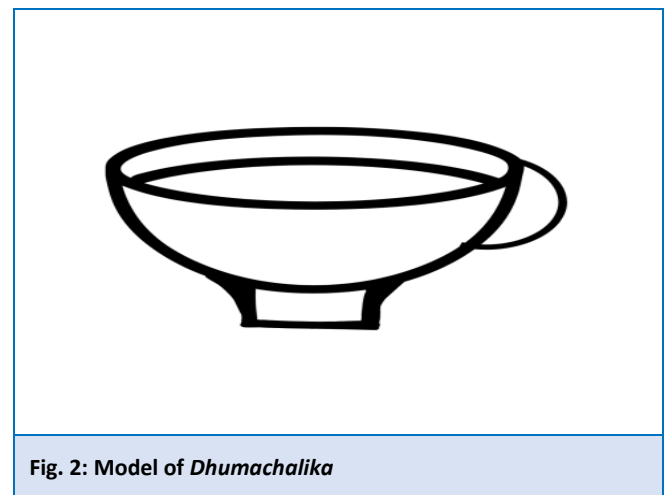


Fig. 2: Model of *Dhumachalika*

MATERIAL

Materials used for making *Dhumanetra* according to classics are rare in use because of its unavailability,

high cost and non accessibility. Considering these, this can be replaced with clay.

Properties of clay: clay is a naturally occurring material composed primarily of fine grained minerals, which shows plasticity through a variable range of water content and which can be hardened when dried or fired. Clay deposits are mostly composed of clay minerals (phyllosilicate minerals) and variable amounts of water trapped in the mineral.^[13]

- Clay is easily available and accessible
- Heat retaining capacity is more
- Does not emit toxic fumes
- It is firm enough to hold its shape, but pliable enough to be moulded into different forms
- It is biodegradable

Medicated Dhumayantra:

There is a mention in classics that one should regularly inhale *Dhumavarti* after smearing it with some unctuous substance and applying fire to it. It is done to ignite *Varti* more easily. Generally, *go Ghrita* is used because this can impart benefits of *Ghrita* to the patient and also facilitates easy ignition. *Go Ghrita* has properties like enhancing *Dhi* (intellect), *Smriti* (memory), *Medha* (discriminative ability), *Agni* (digestion/metabolism), *Bala* (strength/immunity), *Ayu* (longevity), *Sukla* (virility) and *Chakshushi* (vision). It is better for the young and the old. It is desirable for those who wish to have progeny, to enhance complexion, beauty and sweetness of voice. It is congenial for those exhausted of *Ksataksina* (weakness after trauma), afflicted with *Parisarpa* (cellulitis), surgery and cauterization. It pacifies *Vāta* and *Pitta* and cures *visa* (toxicity), *Unmada* (insanity), *Sosa* (emaciation), *Alakshmi* (inauspiciousness) and *Jvara* (fever). It is the most important among *Sneha Dravyas* which is *Sita* and rejuvenative.^[14] By considering all these benefits, along with smearing *Ghrita* onto *Varti*, it can be applied to the *Dhumayantra*.

Preparation of Dhumayantra:

Fine clay is collected and kneaded using bare hands. After continuous kneading, clay becomes soft enough

to be moulded into desired shape (Fig.3). First attempt is to make *Dhumanetra*, for that clay is kept on a polyvinyl chloride (PVC) pipe and shaped using bare hands according to the measurement mentioned (Fig.4). At first it was difficult to mould clay. So, we sought help from a pottery professional and moulded the same as in (Fig.5). Next attempt is to make a base with circumference more than the base of *Dhumanetra*. Then a handle and a hole is made on its side so that we can blow through the hole. Then it is kept in the burner for drying and heated till it loses all its water content and becomes much stronger. After that it's painted using light brown colour (Fig.6) Also after drying and heating, medicated ghee is coated inside the *Dhumanetra* and *Dhuma Chalika*. *Dhumavarti* is kept inside the *Chalika* and *Dhuma* comes out through the tip as in (Fig.7)



Fig. 3: Clay for making Dhumayantra



Fig. 4: Initial phase of Dhumayantra preparation



Fig.5: Dhumanetra



Fig.6: Dhumayantra



Fig.7: Dhuma from Dhumayantra

DISCUSSION

Dhumapana is a therapeutic module mentioned detail in *Ayurvedic* classics. *Dhumanetra* and *Dhumavarti* are essential for performing *Dhumapana*. Different materials are mentioned for making *Dhumanetra*. But many of them are less available, costly, inorganic or non accessible. Due to these drawbacks, materials like folded chart paper, written paper, *Dhumavarti* as such are used. *Dhumapana* using these materials can cause adverse effects like burns, emission of toxic fumes etc. So, we opted clay for remodelling *Dhumayantra*. Considering the material used the defining mechanical property of clay is its plasticity when wet and its ability to harden when dried or fired. Continuous firing of clay transforms it into different materials like metakaolin, which on further firing becomes mullite.^[15] This will make the clay much stronger and hardened. So, clay can tolerate more heat and it doesn't break on heating further. Also clay is easy to be forged into gadgets. Clay is easily available, environment friendly, economical, and non corrosive. Since the raw materials for making *Dhumanetra* are easily available, anybody can make one on their own if required. The entire product is convenient in size so that it can be transported to wherever needed. Throughout the making of *Dhumayantra*, it was difficult to mould by ourselves so we had to seek help from a professional. Medicated ghee is smeared inside the *Dhumayantra* to enhance its medicinal properties. This helps to impart the benefits of ghee also for the patient.

Considering the structure of *Dhumayantra*, *Dhumanetra* is straight conical shaped and is totally different from the *Dhumanetra* in classics. Since the base of *Dhumanetra* is broad, the amount of *Dhuma* will be less so that there is no direct harmful impact of *Dhuma* for the patient. Also this helps to avoid *karnikas* inside. The space inside the *Dhumanetra* also helps in uniform spreading of *Dhuma* inside. Centre of *Dhuma Chalika* is made shallow to keep the *Dhumavarti* and a handle is fixed on the side of *Dhuma Chalika* to grab. A small hole is put on the side of *Chalika* so that we can control the *Dhuma* inside without separating the *Dhumanetra* from *Dhuma Chalika*.

CONCLUSION

In the current scenario, *Dhumapana* done using *Dhumanetra* made of materials mentioned in classics is rare. It is necessary to explore more materials to make such instruments considering the availability, cost, non interaction with fumes; heat retaining capacity, accessibility, even one can make their own. Clay was the choice to manufacture *Dhumayantra*. A *Chalika* attached to *Dhumanetra* is meant to hold the *Dhumavarti* in it and also it has a handle so that users can easily hold the *Dhumayantra*. The structure of *Dhumanetra* is set up in such a way to have uniform filling of *Dhuma* and to reduce harmful effects of *Dhuma*.

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REFERENCES

1. Dr.Shashirekha H.K, Dr.Bargale Sushant Sukumar. Charaka samhita Volume 1. Chaukambha publications. 2017. Chapter 5. Page 97, 46-47
2. Agnivesha, Charaka Samhita edited by Vaidya Yadavaji Trikamji, Chaukambha Subharati Prakashan, Varanasi reprint 2009, siddhisthana 9/89; page no. 722
3. Agnivesa. Charaka Samhita with the Ayurveda Deepika Comm.- Chakrapanidatta Chaukambha Surbharati Prakashan Varanasi, reprint Sutrasthana 5/20-55, 2008.
4. Vagbhatacharya, Ashtanga Hridaya - Sarvanga Sundari Comm. Arunadatta, Chaukambha Surbharati Prakashan Varanasi, reprint Sutrasthana 2/6, 2007.
5. Acharya Sushruta, Sushruta Samhita with the Nibandha Sangraha Comm. – Dalhana Chaukambha Surbharati Prakashan Varanasi, reprint chikitsasthana -40, 2008
6. Dr.Shashirekha H.K, Dr.Bargale Sushant Sukumar. Charaka samhita Volume 1. Chaukambha publications . 2017. Chapter 5. Page 93, 27-32
7. Dr.Shashirekha H.K, Dr.Bargale Sushant Sukumar. Charaka samhita Volume 1. Chaukambha publications . 2017. Chapter 5. Page 92, 20-22
8. Dr.Shashirekha H.K, Dr.Bargale Sushant Sukumar. Charaka samhita Volume 1. Chaukambha publications . 2017. Chapter 5. Page 93, 25-29
9. Agnivesaacharya Charaka Samhita with the Ayurveda Deepika Comm.- Chakrapanidatta Chaukambha Surbharati Prakashan Varanasi, reprint Sutrasthana 5/51, 2008.
10. T. Sreekumar, Ashtangahridaya with English translation and commentary, Harisree publications, 2017, 6th edition, Volume 2, Chapter 21,7-8
11. Prof.K.R.Srikantha Murthy, Susruta samhita, Chaukambha orientalia Varanasi,2019, Chapter 40, page 391,5
12. Shashirekha H.K, Dr.Bargale Sushant Sukumar. Charaka samhita Volume 1. Chaukambha publications . 2017. Chapter 5. Page 92, 20-26
13. Moreno-Maroto, José Manuel; Alonso-Azcárate, Jacinto (September 2018). "What is clay? A new definition of "clay" based on plasticity and its impact on the most widespread soil classification systems". *Applied Clay Science*. 161: 57–63.
14. T. Sreekumar, Ashtanga Hridaya with English translation and commentary, Harisree publications, 2017, 6th edition, Volume 1, Chapter 5,37-39
15. Breuer, Stephen (July 2012). "The chemistry of pottery" (PDF). *Education in Chemistry*: 17–20. Archived (PDF) from the original on 9 October 2022. Retrieved 8 December 2020.

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